



# ARIES

**Airborne Research Integrated Experiments System**

**Open for Tours**



NASA's Boeing 757-200 aircraft is a "flying laboratory" for aeronautical research. The aircraft, called ARIES, is used to conduct research to increase aircraft safety, operating capability, and compatibility with future air traffic control systems.

ARIES is an integral part of NASA's simulation-to-flight concept. This concept incorporates common software, hardware and processes for both flight simulators and the 757. The result is an efficient and cost-effective way to develop and test new technology concepts.

<b>Date of Manufacture:</b> .....	March, 1982
<b>First Revenue Flight:</b> .....	August, 1983 Eastern Airlines
<b>Arrived at Langley:</b> .....	May, 1994
<b>Cost to NASA:</b> .....	\$24 Million
<b>Description:</b> .....	Twin engine, commercial transport, powered by Rolls Royce RB211-535E4
<b>engines</b>	
<b>Max. Take-off Gross Weight:</b> .....	230,000 lbs.
<b>Max. Cruising Speed:</b> .....	.86 Mach
<b>Max. Range:</b> .....	3,836 km.; 2,383 miles
<b>Ceiling:</b> .....	42,000 feet
<b>Length:</b> .....	155'3"
<b>Fuselage Width:</b> .....	12'4"
<b>Height:</b> .....	44'6"
<b>Wing Span:</b> .....	124'10"
<b>Flight Crew:</b> .....	2 pilots (plus subj. pilot for research flights)
<b>Research Crew:</b> .....	12 pallets: 9 "attended" pallets = 20 people; 3 "unattended" pallets; up to 18
<b>extra seats</b>	
<b>Typical Missions:</b> .....	*Weather information systems *Error-proof flight deck *Synthetic vision systems *Runway incursion prevention technologies